

The opinion in support of the decision being entered today was **not** written for publication in a law journal and is **not** binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YUKIO YASUDA

Appeal No. 1998-1444
Application No. 08/543,933

ON BRIEF

Before THOMAS, KRASS, and BARRY, Administrative Patent Judges.
BARRY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the rejection of claims 11-13. We reverse.

BACKGROUND

The invention at issue in this appeal relates to battery charging. A battery charger generally comprises an internal voltage generator for comparing a battery voltage with a reference voltage produced by a reference voltage generating

circuit and for controlling charging according to the detected voltage difference.

To account for variations in the optimum charging voltage of a battery varies with respect to ambient temperature, the inventive reference voltage generating circuit produces a reference voltage that changes linearly with changes in temperature. Figure 2 of the specification shows the inventive circuit. More specifically, a constant voltage power supply 1 supplies an output voltage V_{cc} between a first output terminal and a grounded, second output terminal. A voltage divider circuit, which comprises serially-connected resistors R_1 and R_2 , is connected between the first output terminal and ground. A constant current source 2 is connected to a voltage divider junction 3, viz., the junction between the resistors R_1 and R_2 , and ground. Because the constant current source 2 produces a linear change with temperature in the current I_1 flowing into or out of the voltage divider junction, which functions as an output terminal, a reference voltage V_0 that linearly changes with temperature is output.

Claim 11, which is representative for our purposes, is reproduced from the brief as follows:

11. A reference voltage generating circuit for generating a reference voltage that changes linearly with temperature, the reference voltage generating circuit comprising:

a constant-voltage power supply for outputting a constant voltage and having first and second output terminals;

a voltage divider circuit connected between the first and second output terminals; and

a constant-current source connected to a voltage divider junction of said voltage divider circuit for linearly changing with temperature current flowing into or out of said voltage divider junction, a reference voltage linearly changing with temperature being output from said voltage divider junction.

The references relied on in rejecting the claims follow:

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|--------------------|-----------|---------------|
| Yum et al. (Yum) | 5,327,028 | July 5, 1994 |
| Buck et al. (Buck) | 4,990,846 | Feb. 5, 1991. |

Claims 11-13 stand rejected under 35 U.S.C. § 103 as obvious over Yum in view of Buck. Rather than repeat the arguments of the appellant or examiner in toto, we refer the reader to the brief and answer for the respective details thereof.

OPINION

In deciding this appeal, we considered the subject matter on appeal and the rejection advanced by the examiner. Furthermore, we duly considered the arguments and evidence of the appellant and examiner. After considering the totality of the record, we are persuaded that the examiner erred in rejecting claims 11-13. Accordingly, we reverse.

We begin by noting the following principles from In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993).

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).... "A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)). If the examiner fails to establish a prima facie case, the rejection is improper and will be overturned. In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

With these principles in mind, we address the examiner's rejection and the appellant's argument.

The examiner asserts, "Yum discloses the claimed device ... except for constant voltage power supply. Buck discloses that it is known in the art to provide a constant voltage power supply." (Examiner's Answer at 4.) The appellant argues, "Yum does not extract a reference voltage from the junction of the voltage divider circuit to which the temperature compensating current source is connected." (Appeal Br. at 4.)

"[T]he main purpose of the examination, to which every application is subjected, is to try to make sure that what each claim defines is patentable. [T]he name of the game is the claim'" In re Hiniker Co., 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998) (quoting Giles S. Rich, The Extent of the Protection and Interpretation of Claims--American Perspectives, 21 Int'l Rev. Indus. Prop. & Copyright L. 497, 499, 501 (1990)). Here, claims 11-13 each specifies in pertinent part the following limitations: "a reference voltage linearly changing with temperature being output from said voltage divider junction." Accordingly, the

limitations require outputting a reference voltage from a voltage divider junction.

The examiner fails to show a suggestion of the limitations in the prior art. "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." Para-Ordnance Mfg. v. SGS Importers Int'l, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995)(citing W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1551, 1553, 220 USPQ 303, 311, 312-13 (Fed. Cir. 1983)). "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-1784 (Fed. Cir. 1992) (citing In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)). "It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." Id. at 1266, 23 USPQ2d at

1784, (citing In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991)).

Here, the examiner alleges that, excepting a constant voltage power supply, Yum shows all the claimed invention. He specifically alleges, "Yum discloses the claimed device ... except for constant voltage power supply." (Examiner's Answer at 4.) The reference, however, belies the allegation.

Although Yum teaches a reference voltage V_{REF} and a voltage divider junction 118, col. 6, ll. 49-55, the reference voltage is not output from the voltage divider junction. To the contrary, the reference voltage is output from output terminals. Specifically, "[t]he reference voltage V_{REF} appears between the negative and positive output terminals **114** and **116**." Figure 4 of Yum shows that the output terminals 114 and 116 straddle the voltage divider network comprising resistors R3 and R4. The examiner fails to allege, let alone show, that Buck remedies the defect of Yum.

Because Yum teaches outputting a reference voltage from output terminals rather than from a voltage divider junction, we are not persuaded that teachings from the prior art would have suggested the limitations of "a reference voltage linearly changing with temperature being output from said voltage divider junction." The examiner fails to establish a prima facie case of obviousness. Therefore, we reverse the rejections of claims 11-13 as obvious over Yum in view of Buck.

CONCLUSION

In summary, the rejection of claims 11-13 under 35 U.S.C. § 103 as obvious over Yum in view of Buck is reversed.

REVERSED

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| JAMES D. THOMAS |) | |
| Administrative Patent Judge |) | |
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| |) | BOARD OF PATENT |
| ERROL A. KRASS |) | APPEALS |
| Administrative Patent Judge |) | AND |
| |) | INTERFERENCES |
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| LANCE LEONARD BARRY |) | |
| Administrative Patent Judge |) | |

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LEYDIG, VOIT AND MAYER
700 THIRTEENTH STREET NW
SUITE 300
WASHINGTON, DC 20005

BARRY

APPEAL NO. 1998-1444 - JUDGE

APPLICATION NO. 08/543,933

APJ BARRY - 2 copies

APJ THOMAS

APJ KRASS

DECISION: **REVERSED**

Prepared By: APJ BARRY

DRAFT SUBMITTED: 27 Apr 01

FINAL TYPED:

GJH